

### **REMARKS**

Claims 1, 3-4, 9-12, 14-20 and 24-25 are pending.

Claims 2, 5-8, 13 and 21-23 have been canceled.

Claim 1 has been amended to recite that the “ratio of 1:8 and 1:40” as appearing in step (d) is based upon weight. Support for this Amendment can be found in the paragraph bridging pages 20-21 of the present specification.

Claim 18 has been amended to remove a typographical error.

Claim 20 has been amended to clarify that steps (a)-(c) are in order. Claim 20 has also been amended to recite a polyurethane binder which finds support at page 20, line 19 of the specification. Claim 20 now also recites the specific phosphor which finds support in page 28, lines 1-5 of the specification.

New claim 25 finds support in claim 1.

No new matter has been added to the disclosure.

### **Issues Under 35 U.S.C. § 112**

Claims 1, 3, 4, 9-12 and 24 are rejected under 35 U.S.C. § 112, second paragraph for being indefinite.

Applicants respectfully traverse the rejection.

Specifically, the Examiner objects to the recitation of the “ratio of 1:8 and 1:40” as appearing in step (d) of claim 1. The Examiner finds that this ratio is indefinite since the ratio does not specifically recite whether it is based upon weight or mole.

In response, Applicants have amended step (d) of Claim 1 to clarify that the ratio is by weight. Support for this Amendment can be found in the paragraph bridging pages 20-21 of the present specification.

In view of the fact that the claims, as currently amended, particularly point out and distinctly claim the subject matter of the invention, the claims meet the requirements of 35 USC 112, second paragraph.

As such, withdrawal of the rejection is respectfully requested.

**Claim 20**

The Examiner repeats the following rejection:

Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Weiss et al. (U.S. Patent No. 4,028,550) in view of Leblans et al. (U.S. Patent No. 5,360,578).

Applicants respectfully traverse the rejection.

As noted in the fourth paragraph on page 7 of the outstanding Office Action, the Examiner appears to have maintained the position that claim 20 is not commensurate in scope with the unexpected results described in the Rule 132 Declaration submitted with the April 12, 2005 Amendment.

Accordingly, Applicants have amended claim 20 to clarify that step (c) follows step (b).

Moreover, the Examiner has stated that "Weiss teaches that the phosphor may be BaFC1:(.02)Eu," see the 4<sup>th</sup> full paragraph on page 3 of the Office Action. However, this substance is outside the scope of the stimuable phosphor recited in amended claim 20.

In view of the fact that the present claims fully describe and are commensurate in scope with the unexpected results shown in the experiments which are of record, a *prima facie* case of obviousness cannot be said to exist. As such, withdrawal of the rejection is respectfully requested.

**Sections “6.” – “8.” of the outstanding Office Action.**

The Examiner has imposed the following new prior art based rejections:

- Claims 1, 3-4, 9, 12, 20, and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jamil (U.S. Patent No. 5,772,916) in view of Arakawa et al. (U.S. Patent No. 6,031,236);
- Claim 10 is rejected under 35 U.S.C. § (a) as being unpatentable over Jamil (U.S. Patent No. 5,772,916) and Arakawa et al. (U.S. Patent No. 6,031,236) as applied to claim 1 above, in view of Leblans et al. (U.S. Patent No. 5,360,578); and
- Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jamil (U.S. Patent No. 5,772,916) and Arakawa et al. (U.S. Patent No. 6,031,236) as applied to claim 9 above, in view of Hultsch et al. (U.S. Patent No. 4,405,454).

Applicants respectfully traverse all of the rejections.

It is noted that Jamil et al. is the base reference for all of these rejections.

The Examiner relies heavily upon Jamil et al. for teaching the order of steps as presently claimed. It appears that a major distinction between the teachings of Jamil et al. and the present process is that Jamil et al. teach a drying step between steps (b) and (c) in column 11, lines 58-62.

The Examiner appears to have considered the fact that Jamil et al. teach a drying step between steps (b) and (c), however, the Examiner states that Jamil “does not teach a criticality for drying the phosphor.” (See page 4, lines 17–24 of the outstanding Office Action). The Examiner believes that it would have been obvious to remove the drying step, since the drying step is not taught to be critical and one would have been motivated to do so to reduce the number of steps in the process. Applicants respectfully disagree.

Jamal et al. require the drying step, i.e., the drying step is not taught to be an option. The Examiner's assertion that one would be motivated to remove the drying step to reduce the number of steps is untenable. According to the MPEP 2143.01, “[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no ... motivation to make the proposed modification.” It is Applicants' position that the removal of the

drying step would render the invention of Jamil et al. unsatisfactory for its intended purpose when taking into consideration that the instant binder is polyurethane.

Jamil et al recite, in col. 11, line 29, that the solvent which is used to make a suspension of the reactivated powder is most preferably isopropyl alcohol. On the other hand, Jamil et al. recite, in col. 12, line 35, that the solvent used to form a binder solution is preferably methyl-ethylketone. These solvents are actually used in Examples I to III in col. 15 to 17 (see, for example, col. 15, lines 63 to 64, and Table 5). When modifying the Examples of Jamil to reach the presently claimed invention, the binder has to be changed to polyurethane. However, polyurethane is insoluble in isopropyl alcohol because of the difference in the degree of polarity. Therefore, the isopropyl alcohol used to suspend the reactivated powder has to be removed before polyurethane is added, and thus the drying step would be essential. In other words, in order to modify the process of Jamil to resemble the presently claimed process, the drying step for removing isopropyl alcohol, which cannot dissolve polyurethane, has to be conducted. In contrast, such a drying step is conducted neither in claim 1 nor claim 20 of the present application. Accordingly, a person in the art cannot devise the presently claimed process based on Jamil et al.

The Examiner relies on the secondary references of Arakawa et al., Leblans et al. and Hultsch et al. for curing the deficiencies of Jamil et al. In view of the fact that none of these secondary references teach or fairly suggest modifying Jamil et al. to not have a drying step between steps (b) and (c), these secondary references do not cure the deficiencies of Jamil et al.

Based on the foregoing, withdrawal of the rejections is respectfully requested.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, Ph.D., Esq. Reg.

No. 43,575 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: January 4, 2007

Respectfully submitted,

By  #43575

Marc S. Weiner  
Registration No.: 32,181  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant